

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

DESCRIPTION

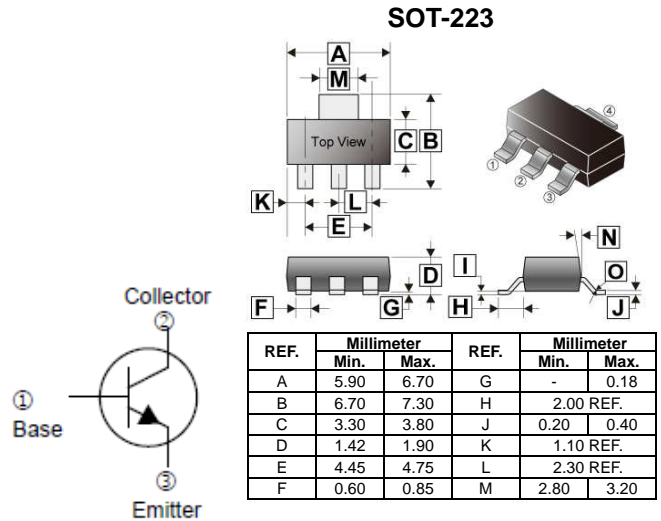
- General Purpose Amplifier and Switch Application
- Low Voltage and Low Current

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-223	2.5K	13 inch

ORDER INFORMATION

Part Number	Type
PZT3904-C	Lead (Pb)-free and Halogen-free



MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V _{CB0}	60	V
Collector-Emitter Voltage	V _{CEO}	40	V
Emitter-Base Voltage	V _{EBO}	6	V
Collector Current	I _C	200	mA
Total Power Dissipation	P _D	1	W
Thermal Resistance from Junction to Ambient	R _{θJA}	125	°C/W
Junction, Storage Temperature	T _J , T _{STG}	150, -55~150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-Base Breakdown Voltage	V _{(BR)CB0}	60	-	-	V	I _C =10uA, I _E =0
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	40	-	-	V	I _C =1mA, I _B =0
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	6	-	-	V	I _C =10uA, I _C =0
Collector Cut-Off Current	I _{CBO}	-	-	50	nA	V _{CB} =30V, I _E =0
Emitter Cut-Off Current	I _{CEX}	-	-	50	nA	V _{CE} =30V, V _{BE} =3V
Collector Cut-Off Current	I _{EBO}	-	-	50	nA	V _{EB} =5V, I _C =0
Collector-Emitter Saturation Voltage	V _{CE(sat)}	-	-	0.2	V	I _C =10mA, I _B =1mA
		-	-	0.3	V	I _C =50mA, I _B =5mA
Base-Emitter Voltage	V _{BE(sat)}	0.65	-	0.85	V	I _C =10mA, I _B =1mA
		-	-	0.95	V	I _C =50mA, I _B =5mA
DC Current Gain	h _{FE1}	40	-	-		V _{CE} =1V, I _C =100uA
	h _{FE2}	70	-	-		V _{CE} =1V, I _C =1mA
	h _{FE3}	100	-	300		V _{CE} =1V, I _C =10mA
	h _{FE4}	60	-	-		V _{CE} =1V, I _C =50mA
Transition Frequency	f _T	300	-	-	MHz	V _{CE} =20V, I _C =10mA, f=100MHz
Collector Output Capacitance	C _{OB}	-	4	-	pF	V _{CB} =5V, I _E =0, f=1MHz
Delay Time	T _d	-	35	-	nS	V _{CC} =3V, V _{BE(OFF)} =0.5V I _C =10mA, I _{B1} =-I _{B1} =1mA
Rise Time	T _r	-	35	-		
Storage Time	T _s	-	200	-		
Fall Time	T _f	-	50	-		

CHARACTERISTIC CURVES

